



B I O M E

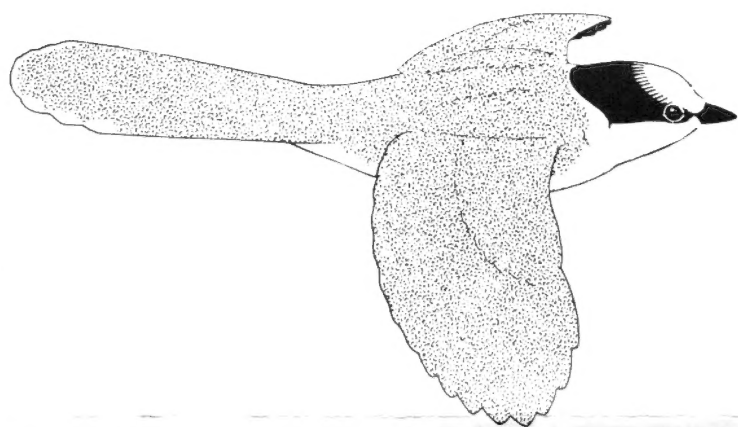
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The 19th International Ornithological Congress



One hundred and two years ago, the oldest regularly meeting biological congress of its kind met for the first time in Vienna, Austria. This summer, at its 19th meeting, the International Ornithological Congress marks its 100th anniversary at its second-ever North American gathering. The National Museum of Natural Sciences, with the assistance of the Canadian Wildlife Service and the Society of Canadian Ornithologists, is hosting a conference that will bring together in Ottawa scientists from more than 60 countries. Such a large gathering requires considerable organization, a task that has been in progress since the 1978 Berlin meeting and in full swing following a formal invitation to the 18th congress in Moscow four years ago.

International scientific meetings are a welcome opportunity for researchers from around the globe to compare notes, share experiences, and discuss new discoveries. This meeting is expected to attract about 2,000 participants who will present over 700 papers on topics ranging from the comparative anatomy of birds to the historical impact of ornithology in the biological sciences. They will discuss avian vision, birds as pests and song dialects, and will return home with news of exciting discoveries concerning survival strategies of birds and homing. This wide variety of topics centres around the congress theme of "Ornithology as an interdisciplinary science." Scientists will also be able to attend workshops and informal roundtable discussions where much

of the "work" of science gets hammered out. An important part of the congress will take place before and after the formal meeting, as experts lead excursions to local wildlife habitats, seabird colonies in British Columbia, bird sanctuaries in Newfoundland, and remote areas of the Canadian Arctic, giving participants a chance to discover Canada close-up.

To coincide with the congress, the NMNS will be presenting various events to help the public celebrate the wonder of birds and the science of ornithology. These undertakings include exhibits on the history of bird illustration in this country and the evolution of decoy carving, a photographic exhibition co-sponsored by the Museum and the Canadian Nature Federation, and massive renovations to the *Birds in Canada* gallery. There will be a tribute to the Museum's first curator of birds, P.A. Taverner, and films dealing with ornithological subjects will also be featured.

The International Ornithological Congress is a vital link in the scientific process leading to a better understanding of the natural world, and we should be proud that the Canadian scientific community has accepted the challenge and extra work required to execute a successful meeting. Although most of us will not participate in this process, having such an important meeting in Canada may cause us to reflect on our personal concern for the natural world and our place in it.

Randy Miller

The Gray Jay: Symbol of the I.O.C.

Most people recognize the familiar birds of Canada. They know the American Robin that signals the return of spring and the Black-capped Chickadee that visits the bird-feeder in winter. They know the characteristic shape of a flock of migrating Canada Geese and easily spot the bright splash of colour on a Red-winged Blackbird. Canoeists have probably seen a Great Blue Heron taking flight along a lakeshore, and many campers have wondered at the boldness of a noisy grey bird curiously inspecting their camp. This grey bird is a common companion of hikers in our northern forests, and its antics have earned it the nickname "camp-robber."

The Gray Jay (*Perisoreus canadensis*) is so characteristic of our great coniferous forests that it was once known as the Canada Jay, until it was renamed in 1957 to join the Blue Jay and the Green Jay. Described as being an aggressive, almost contemptuous bird, the Gray Jay will eat just about anything from licorice all-sorts to axle grease, and carry off anything not tied down. Besides being curious, it can be extremely noisy, with a varied repertoire of harsh notes, soft warbles and whistles that can mimic the songs of other birds.

Unlike its more colourful relative the Blue Jay, the Gray Jay is crestless. Its head is white with a black cap that extends forward to surround the eyes like a bandit's mask. Most of the upper body is a slate-grey colour with white-tipped flight and tail feathers. The abdomen and flanks are plain grey.

The Gray Jay breeds from the treeline in the Yukon and Alaska, across Canada to south-central Ontario and the Maritimes. Like many other boreal animals, it also lives in the western mountains of the United States south to California



The Gray Jay is a common companion of hikers in our northern forests, and its antics have earned it the nickname "camp-robber."

and New Mexico. In the winter it is often found south of its breeding range and can be seen in places like Ottawa, more than 150 km outside its usual habitat. In 1974 a nest was found this far south in the Mer Bleue Bog, about 15 km east of Ottawa. The Mer Bleue Bog is a unique boreal-like habitat that has attracted at least two nest-building Gray Jays to eastern Ontario.

Typical of the species, the pair constructed a nest of twigs about 1.2 m up in a spruce in early March. The inside of the nest was lined with moss, cattail down, Gray Jay down and a few feathers from chickens, crows, and grouse. The nest took about 20 days to build and held three mottled, greyish eggs for another 18 days. In this, as in their usual habitat, the jays were

probably predators, stealing the eggs and young from sparrows or robins or attacking small rodents; Gray Jays are always opportunists, feeding on larger animals killed by others or happy to find blueberries, seeds and fruits. In the late summer they may have collected food, coating it in saliva to cache in the forest as an unexpected prize for next year when they might return before the last snow.

The International Ornithological Congress being held this summer in Ottawa has adopted the Gray Jay as its symbol. A stylized Gray Jay swoops across the I.O.C. pamphlet, perhaps to a place in the Mer Bleue Bog, or across the boreal forest.

Randy Miller

EDITORIAL

Scientific Conferences: The Intellectual Boxing Ring

Research not communicated is research not finished. In fact it is a waste of time and effort to do research if you don't pass on your discoveries to others. Among scientists, there are two main methods of telling each other of results: 1) the published technical paper; and 2) the oral presentation at a scientific conference.

The published technical paper must pass two anonymous expert referees before it is published, so it is a well-tested presentation that has a solid backbone of assurance of being correct. It also takes about 1-2 years to get one published. But what about the results that are new and urgent, or controversial, or speculative, or just plain confusing?

This is what the scientific conference is used for, this is why such gatherings are so exciting. Each scientist who stands up in front of his colleagues to make a presentation challenges them to find him wrong, or to find another logical explanation for the results. It takes confidence, courage and conviction to say: "I found the following results, and I deduce that they mean this.", especially if the answer you present contradicts the answer that some famous scientist sitting in the audience found earlier!

But perhaps the most important function of the scientific gathering happens informally, when you get a chance to corner some other scientist and challenge him privately, or to ask the advice of someone who is a genius in another related field about some aspect of your own research. The most exhilarating time is when a symposium theme is developed, and the resulting round-table discussions toss out old theories and usher in new concepts. Sometimes these shake the foundations of our own concepts of reality and truth!

This is a boxing ring where the combatants are in the ring, but the whole world is the winner.

Alan R. Emery
Director

Museum Ornithologist: Dr. Henri Ouellet

Any organized event has at least two requirements: 1) people to attend, and 2) people to organize. The International Ornithological Congress being held in Ottawa this summer has both, and, in the middle, pulling it all together, has been the National Museum of Natural Sciences' own Dr. Henri Ouellet, ornithologist and I.O.C. Secretary General.

Dr. Ouellet earned a B.A. in Biology from the University of New Brunswick and then a M.Sc. and Ph.D. from McGill University, where he pursued his interest in zoology by studying the zoogeography of birds and the biosystematics and ecology of woodpeckers. He is currently Chief of the Vertebrate Zoology Division and Curator of Birds at the NMNS.

His research interests have taken him across Canada, but Dr. Ouellet's most extensive project is a study of the birds of Quebec and Labrador. Current plans call for a total of 15 field trips and expeditions until 1990, for a survey of the northern Labrador coast and the western tip of the Ungava Peninsula. The aim is to synthesize the ecology, distribution and taxonomy of the varied species inhabiting this vast area. Another of his scientific interests is the evolution and specia-

tion of a group of "seed-eating" birds that are found only in parts of Central and South America.

As the Museum's ornithologist, Dr. Ouellet is also involved in the development of the NMNS ornithology collection and an analysis of the bird fauna of Canada, building on the work of his predecessors, P.A. Taverner and W.E. Godfrey, who described the distribution and variation patterns of Canadian birds. As well as numerous scientific articles, he has produced two Museum publications entitled *Les oiseaux des collines montréalaises et de la région de Montréal* and *Les oiseaux de l'île Anticosti*. Among his scientific papers is a description of the first record of the Gray Jay (the 1986 I.O.C. symbol) nesting near Ottawa.

Dr. Ouellet's keen interest in birds has led to participation in many films that have helped bring his expertise to non-professionals as well. He has been a consultant on films about winter birds and bird feeders, and he produced with Jean-Louis Frund and the National Film Board of Canada *The Great Blue Heron*, an international-award-winning film.

Randy Miller



Free Birds!

Birds on paper, that is! The bestselling *Natural History Notebooks*, illustrated by Charles Douglas, appeal to campers, hikers, bikers, fishermen and armchair naturalists. Each of the five books sells for \$2.95 and contains 52 pen-and-ink drawings accompanied by a description of the lifestyle and habitat of the animal shown. Look for them in your bookstore.

The Museum also distributes selected free reprints from this

series, and in keeping with the theme of this issue of *BIOME*, we will be happy to send you 10 "free birds" if you call or write to the Museum Information Centre. Please specify the topic of your choice: North American Birds, Birds From Other Continents, or Rare, Endangered and Extinct Birds. A list of our other free materials is also available upon request.

BIOME

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PROGRAMMES ET ACTIVITÉS

au Musée national des sciences naturelles

De juin à septembre 1986

Des oiseaux partout

Le Musée national des sciences naturelles continue de célébrer le monde merveilleux des oiseaux à l'occasion du 19^{ième} Congrès ornithologique international qui se tiendra à Ottawa du 22 au 29 juin.

Il y a d'abord lieu de mentionner les rénovations considérables qui sont apportées à notre galerie «Les oiseaux du Canada». Ces travaux visent à améliorer l'éclairage de la galerie, à souligner l'importance des saisons pour les populations d'oiseaux du Canada, et par le fait même le phénomène de la migration, ainsi qu'à mettre davantage en valeur les magnifiques dioramas du Musée. En ce qui concerne les publications, une nouvelle édition de notre best-seller *Les oiseaux du Canada* sera en librairie cet été; un livre d'activités sur les oiseaux a en outre été publié à l'intention des enfants. Pour en savoir davantage, vous pourrez consulter l'édition de l'été 1986 de notre journal *BIOME*.

L'une des nouvelles expositions temporaires portera sur l'histoire de l'illustration d'oiseaux au Canada depuis le XVIII^e siècle; certaines oeuvres peu connues, notamment des livres, des gravures et des peintures, seront exposées. «Les appelants attirants» offrira un bref historique de la sculpture sur bois,

de l'appelant objet d'art populaire, à la sculpture moderne d'oiseaux. Les oeuvres présentées sont tirées de la collection du Musée national des sciences naturelles et mettent en valeur des sculpteurs renommés. Des membres de l'Association des sculpteurs sur bois de l'Outaouais participeront à l'exposition en travaillant sur place du mercredi au dimanche, en après-midi, du 26 juillet au 10 août. L'exposition «P.A. Taverner, ornithologue» rendra hommage au premier conservateur d'oiseaux du Musée, dont les travaux constituent un apport inestimable à l'étude des oiseaux au Canada.

Au nombre des expositions en cours prévues au calendrier estival, mentionnons «Les oiseaux les plus beaux», première exposition itinérante de photos coparrainée par le Musée national des sciences naturelles et par la Fédération canadienne de la nature. Les 93 oeuvres exposées ont été choisies parmi plus de 400 photos soumises à un concours national organisé par ces deux institutions. Après son séjour à Ottawa, cette exposition entreprendra une tournée de deux ans au pays. D'autre part, «Maisons d'oiseaux» présente une collection de maisons naturelles, offre des

renseignements sur la façon de construire des nichoirs et propose un échantillonnage de superbes maisonnettes de la collection d'art populaire du Musée national de l'Homme, qui furent construites au fil des ans par des ornithologues amateurs canadiens à l'imagination fertile. En visitant «Des oiseaux partout», on peut s'initier à l'identification de ces créatures fascinantes. Cette exposition comporte d'attrayants spécimens, des «casse-tête» en feutre pour les tout-petits, ainsi que des jeux électroniques pour tous les observateurs d'oiseaux, débutants ou experts. On trouvera dans le calendrier ci-dessous certaines questions tirées de ces jeux. Venez mettre vos connaissances à l'épreuve!

Des ateliers d'origami pour apprendre à confectionner des mobiles d'oiseaux en papier, des vidéos permanents et une conférence publique donnée par Robert Kerr, sculpteur renommé de la vallée de l'Outaouais, viendront compléter l'hommage que le Musée rendra du 14 juin au 28 septembre à nos amis les oiseaux.

Les portes du Musée sont ouvertes sept jours par semaine, de 10 h à 17 h. Elles seront fermées les lundis à compter du 2 septembre,



sauf les jours fériés. Veuillez noter que le Musée sera ouvert à 19 h pour la conférence de Robert Kerr.

L'entrée est toujours gratuite. Soyez de la partie!

CALENDRIER • DES • ÉVÉNEMENTS

JUIN

D	L	M	M	J	V	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JUILLET

D	L	M	M	J	V	S
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBRE

D	L	M	M	J	V	S
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JUIN

Tous les événements sont présentés à la Galerie des expositions temporaires (côté est du 3^e étage) sauf indication contraire

Quel est le mot latin désignant la classe des oiseaux?

exposition en cours

«Les oiseaux les plus beaux»
Mezzanine (2^e étage)

exposition en cours

«Maisons d'oiseaux»

exposition en cours

«Des oiseaux partout»

14 et 15 13 h à 16 h 30

L'origami
ateliers bilingues

15

fin de l'exposition
«Maisons d'oiseaux»

18

19 h 30

conférence
Personal Insight on Bird Carving



en anglais trad. sim. en français
et int. en langage gestuel
Auditorium (rez-de-chaussée)

19

ouverture de la galerie
permanente rénovée
«Les oiseaux du Canada»
(côté est du 2^e étage)

19

ouverture de l'exposition
«Les appelants attirants»

19

ouverture de l'exposition
«L'illustration d'oiseaux au Canada»
Galerie des événements spéciaux
(côté est du 3^e étage)

Quelle particularité permet
de reconnaître un oiseau?

JUILLET

À partir de quel ancêtre commun
les oiseaux ont-ils évolué?

3

ouverture de l'exposition
«P.A. Taverner, ornithologue»
rez-de-chaussée

28

fin de l'exposition
«Les oiseaux les plus beaux»

Quel est le plus petit
des oiseaux actuels?

SEPTEMBRE

Combien d'espèces d'oiseaux
existe-t-il encore de nos jours?

28

fin de l'exposition
«Des oiseaux partout»

28

fin de l'exposition
«Les appelants attirants»

28

fin de l'exposition
«L'illustration d'oiseaux au Canada»

28

fin de l'exposition
«P.A. Taverner, ornithologue»

Quel est le meilleur moyen
d'identifier un oiseau dans une
forêt dense?

Angle des rues Metcalfe et McLeod



Musées nationaux
du Canada

National Museums
of Canada

Canada



PROGRAMS AND ACTIVITIES

At the National Museum of Natural Sciences

June/September 1986

Birds, Birds, Birds ...and more birds

The National Museum of Natural Sciences continues to celebrate the wonder of birds in honour of the 19th International Ornithological Congress, which is taking place in Ottawa from June 22 to 29.

Very special undertakings include massive renovations to our *Birds in Canada* gallery. These renovations make the gallery brighter, emphasize the importance of the seasons and migration to Canada's bird populations, and provide clearer interpretation for the Museum's renowned dioramas. The revised edition of the Museum's premier publication, the bestselling *The Birds of Canada*, will be available in bookstores this summer and a new children's bird activity book has also been published; see the summer 1986 edition of our newspaper, *BIOME*, for further information.

New temporary exhibits and displays include *The Illustrated Bird in Canada*, a glimpse at the history of bird illustration in this country since the 18th century. Some rarely seen works, including books, prints and paintings, will be

on display. *The Real Decoy* will give a brief history of the evolution of decoy and bird carving and feature the work of some well-known carvers. Members of the Outaouais Wood Carvers will participate in the exhibit by carving on site Wednesday through Sunday afternoons from July 26 to August 10. The *P.A. Taverner, Ornithologist* display will present a tribute to the Museum's first curator of birds, whose work remains an invaluable contribution to the study of birds in Canada.

Among the continuing exhibits and displays on the summer roster, there is *Best of the Birds*, the first photographic exhibition co-sponsored by the National Museum of Natural Sciences and the Canadian Nature Federation. The 93 works on view were chosen from over 400 submitted for competition from across Canada. *Best of the Birds* will travel throughout Canada for two years following its showing in Ottawa. *Bird Homes* features a collection of natural homes, provides information on how to build simple nest boxes, and offers a

sampling of a superb National Museum of Man collection of homes built by imaginative Canadian bird lovers over the years. Visitors to *Birds, Birds, Birds* can learn the first steps in identifying these fascinating creatures. There are colourful specimens, felt "puzzles" for the very young, and computer quizzes for every bird watcher — novice or expert. Some of the computer questions are listed in the calendar below: come and see if you have the correct answers!

Origami workshops in which participants can learn to make origami bird mobiles, ongoing videos, and a public lecture by Robert Kerr, a well-known Ottawa Valley carver, will complete the Museum's salute to our feathered friends, June 14 to September 28.

Our doors are open seven days a week, from 10 a.m. to 5 p.m. Closed Mondays after September 1, except on public holidays. Please note that we will open at 7 p.m. to allow access to Robert Kerr's lecture. Admission is always free — join us!



CALENDAR OF EVENTS

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JUNE

All activities are presented in the Temporary Exhibits Gallery (3rd floor east) unless otherwise noted

What's the Latin name for the class of birds?

continuing exhibit

Best of the Birds
Mezzanine (2nd floor)

continuing display

Bird Homes

continuing display

Birds, Birds, Birds

14 & 15 1 p.m. to 4:30 p.m.

Origami
bilingual workshops

15

end of display
Bird Homes

18

7:30 p.m.

lecture
Personal Insight on Bird Carving



in English. Sim. French trans.
& int. for hearing impaired
Auditorium (1st floor)

19

reopening of
Birds in Canada
Gallery
(2nd floor east)

19

opening of exhibit
The Real Decoy

19

opening of exhibit
The Illustrated Bird in Canada
Special Events Gallery
(3rd floor east)

What single characteristic identifies birds?

JULY

From what ancestor did birds evolve?

3

opening of display
P.A. Taverner, Ornithologist
Foyer (1st floor)

28

end of exhibit
Best of the Birds

What is the smallest living bird?

SEPTEMBER

What's the easiest way to identify birds in a dense forest?

28

end of display
Birds, Birds, Birds

28

end of exhibit
The Real Decoy

28

end of exhibit
The Illustrated Bird in Canada

28

end of display
P.A. Taverner, Ornithologist

About how many living bird species are there?

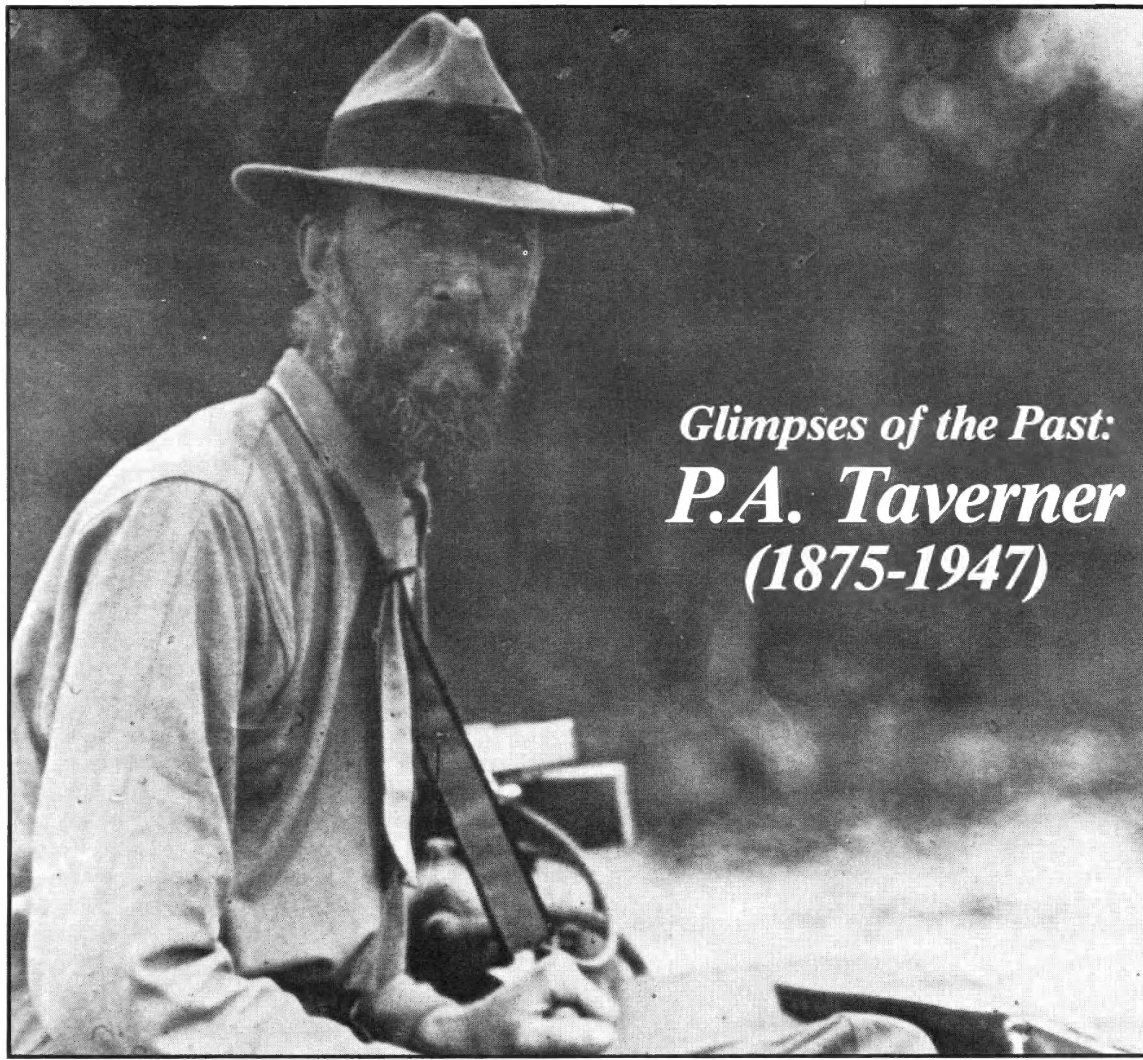
Corner of Metcalfe and McLeod Streets



National Museums
of Canada

Musées nationaux
du Canada

Canada



Glimpses of the Past:
P.A. Taverner
(1875-1947)

Born in Guelph, Ontario, Percy Algernon Taverner had an unusual and nomadic childhood; his mother and stepfather owned a theatre company that travelled constantly throughout eastern Canada and the eastern United States. The family lived for a short time in Ann Arbor, Michigan, where, as a high school student, Taverner met the taxidermist at the University Museum and began learning taxidermy and seriously studying birds.

As a young man, he earned his way in a variety of jobs. For a short time he even rowed drunks and other late nighters across the St. Clair River after the last ferry had crossed — and carried a cudgel under his seat to ensure order among his passengers!

Taverner was later employed as an architectural draftsman in Chicago and Detroit, but continued his study of birds in his spare time, and became a founding member of the Great Lakes Ornithological Club. His dedication and knowledge brought him increasing scientific recognition, resulting in his appointment as ornithologist to the original National Museum of Canada in 1911.

Taverner then began what was to become the most important

aspect of his life's work: a unique, detailed recording of the distributions of all birds known to occur in this country, based on a range map for each species. Using this system, a researcher could, almost at a glance, obtain information about a bird's range in Canada.

During his career with the National Museum, Taverner also singlehandedly put into order a small and uncared-for collection of fewer than 5,000 specimens, and increased it to over 30,000. He published more than 300 scientific and popular articles; his books, *Birds of Eastern Canada*, *Birds of Western Canada*, *Birds of Canada*, and two pocket field guides on land and water birds stand out as classic works, instrumental in popularizing bird study in Canada. His concern for birds and the environment involved him in the establishment of Point Pelee National Park and several bird sanctuaries, including Bonaventure Island.

Taverner was self taught in the field he loved, and his innovative work remains an invaluable contribution to the study of birds in Canada.

Bob McFetridge
Public Services Division

Migration

Every autumn it's the same. As days grow shorter and nights become colder, European Starlings gather in noisy, restless flocks, then burst into the air and wheel southward. Nervously, warblers gorge themselves, adding half their weight in fat.

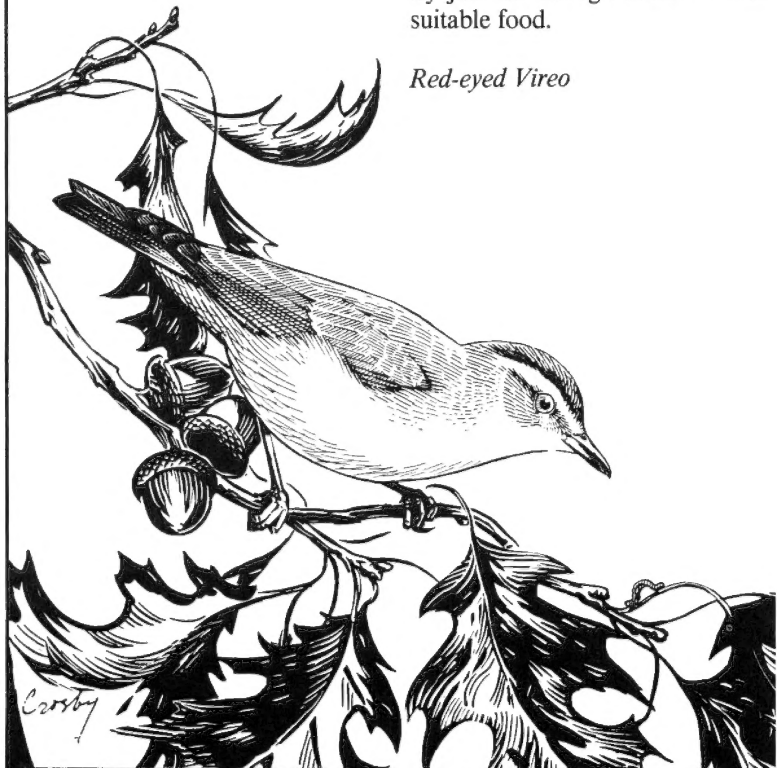
Suddenly, the warblers too are gone. Navigating by the stars and "memory maps," they travel hundreds of kilometers a night, resting only during the day. Some of our small songbirds will get to Central America by way of Mexico and some will island-hop through the Caribbean, but many species will tackle the 800 km trip over the Gulf of Mexico head-on.

And many individuals won't make it. Storms may blow them far off course, or out to sea, leaving

rows of tiny bodies scattered on the beaches. Their mysterious, amazing navigation system, millions of years in the making, may try to use the lights of tall buildings or radio towers, guiding the migrants to slam into steel and glass. Even those that do survive mishaps and predators will come perilously close to exhausting their small energy reserves.

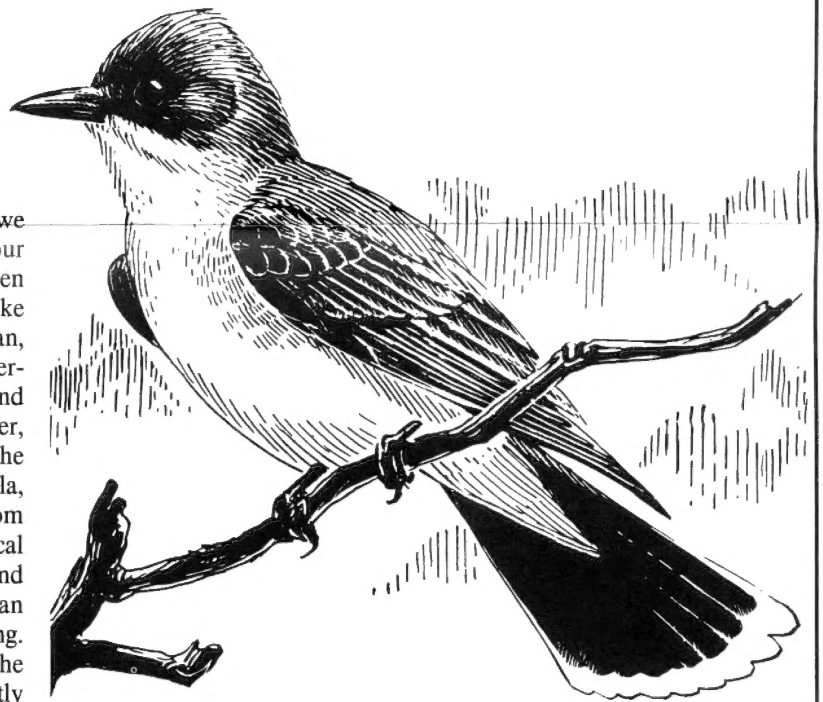
Why do they do it? Why not stay put and grow more feathers like the chickadees and grouse? The cold itself doesn't seem to be the reason. Cardinals remain in their northern ranges when they find a reliable bird-feeding station. It may well be that food availability is the main factor, especially for insect-eating birds. Indeed, a great many species, such as the Purple Finch, fly just far enough south to find suitable food.

Red-eyed Vireo



Meanwhile, back up north, we give little thought to where our birds go or what they do when they're there. We assume that, like vacationers in the Caribbean, they're having a good time, generally behaving like tourists and antagonizing the locals. However, if we were able to follow the American Redstart to Venezuela, we would find that, far from elbowing its way into the local populations of Slate-throated and Collared Redstarts, it has an ecological niche just waiting. Individual birds will return to the same territory every winter, mostly in the lowlands, while the resident birds tend to live in the highlands. Since our redstarts spend seven months in their winter range, they could be said to be tropical birds that come north to breed, rather than Canadian birds that go south for the winter.

Many other birds lead double lives. Our Red-eyed Vireo, an insect-eater here in Canada, partly avoids competition with the local vireos in Central America by feeding on berries in habitats unused by the local species. This avoidance of direct competition hints to biologists that birds have "coevolved," with each species gradually settling into a particular way of life that interferes the least with others. But some birds can bend this ecological rule; the Eastern Kingbird is an aggressive, solitary flycatcher in its northern persona. In the tropics, it gathers in flocks that wander about, eating fruit from trees along Amazonian river edges. The resident kingbirds are mostly insect-eaters, but may try to chase the migrants from the fruit trees. The migrants hopelessly outnumber the



Eastern Kingbird

locals, however, and you could say it's a "fruitless" effort.

Even though some vireos, kingbirds and redstarts live in the tropics year-round, there are definite advantages to migrating north to breed. Principal among these is the abundance of high-protein insect food. The northern summer is characterized by an immense bloom of all kinds of life that the tropics rarely see. North America provides large areas for establishing roomy nesting territories, and northern breeders typically lay more eggs than the same species in the tropics, and raise more young. The days are longer in the north, with arctic birds having almost continuous daylight in which to feed and grow. Because the birds are here only briefly, no specialized bird-eating predators have evolved (except for some hawks, which are migratory birds themselves). In the tropics, there are snakes that specialize in swallowing birds' eggs, and large tarantulas that lie in wait for careless birds.

It seems reasonable to assume that migration in birds, like migration in Monarch butterflies, grey whales, and caribou, is one of the options open to most animals, given the availability of suitable ranges. Long ago, southern birds gradually expanded their breeding ranges to favourable temperate regions; and changes in geography, climate and vegetation have led to present migration patterns. For example, during the last ice age, the Gulf of Mexico was considerably smaller than it is now, and the Caribbean island archipelagos formed land routes to the tropics. When the ice melted, and the oceans rose, migrating birds were forced to extend their overseas passages to the amazing journeys we see today. Migration has developed over millions of years — and is still evolving.

Doug Hoy
Public Services Division

Off the Press



NMNS reissues "The Godfrey":

The Birds of Canada
(Revised edition)
W. Earl Godfrey

Colour illustrations by John A. Crosby
Line drawings by S.D. MacDonald and John A. Crosby

600 pp., 74 colour plates, 102 line drawings, 386 range maps
ISBN 0-660-10758-9
310 × 230 mm
\$39.95 (HB)

Édition française:
Les oiseaux du Canada
ISBN 0-660-90265-6

For 20 years, *The Birds of Canada* has been a virtual bible to bird watchers in this country and beyond. Now, Dr. W. Earl Godfrey, former Chief of the Museum's Vertebrate Zoology Division, has revised this definitive book, which covers all species known in Canada from historic times to the present.

"Canada is a particularly challenging country to write about because of its ecological diversity. You have birds adapting to everything from Arctic conditions to a Maritime or Prairie climate. It's much more complex than say, a place like England, where climate tends to be fairly uniform" he notes.

The first edition, published in 1966, listed 518 species; the revised edition lists 578. "One has to keep up with the times, as so much has changed in terms of range. Some birds such as the Ring-billed Gull have greatly increased their population, while others like the Peregrine Falcon have decreased drastically." New species not normally seen in Canada have been observed, and while Dr. Godfrey says that these are probably accidental strays from normal ranges, these sightings should be recorded. Distribution maps have thus been revamped in consultation with bird watchers across the country.

Museum artist John Crosby contributed many new illustrations.

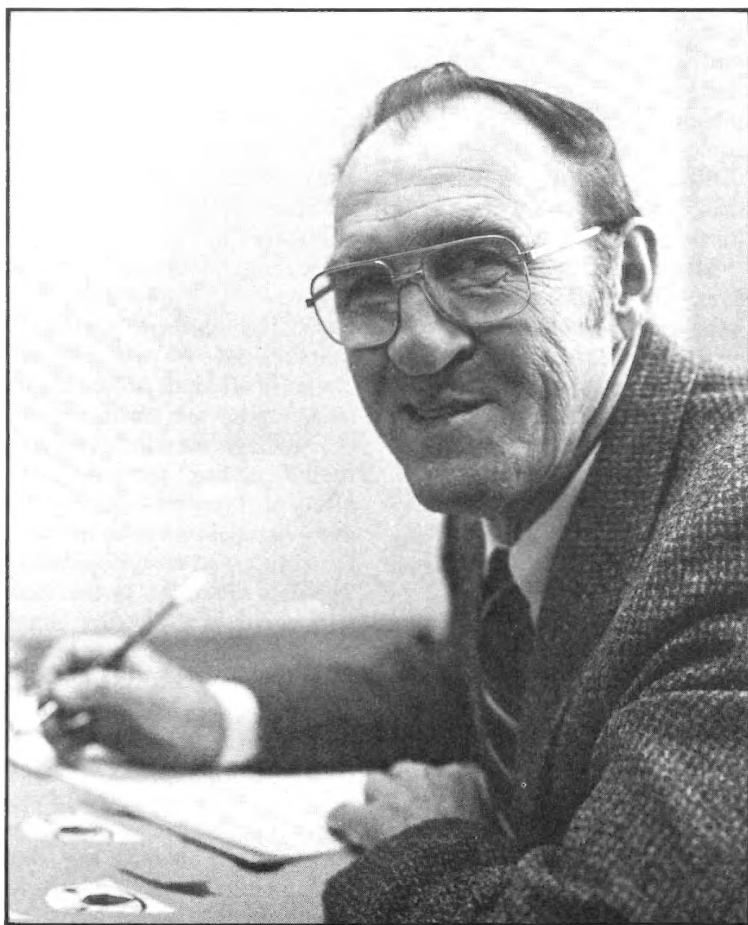
A completely revised layout makes for easy reference. Updated information is arranged under various headings: general description, measurements, habitat, field marks, voice, nesting, total range, range in Canada, and subspecies. Bird names and taxonomy have also been revised to meet the American Ornithologists' Union Check-List. There are frequent notes on feeding habits, and flight silhouettes are provided to facilitate recognition of hawks and shorebirds on the wing. Museum artist John Crosby contributed many new black-and-white drawings to this already profusely illustrated book, as well as paintings for new colour plates and a stylish jacket.

Designed as a long overdue successor to P.A. Taverner's landmark *Birds of Canada* (1934), "The Godfrey," as bird watchers have affectionately nicknamed it, has sold over 140,000 copies since it was first published and is by far the

Dr. W. Earl Godfrey, former Chief of the Museum's Vertebrate Zoology Division. "The Godfrey," as bird watchers have affectionately nicknamed his book, has sold over 140,000 copies since it was first published.

Museum's bestselling book. It was reprinted several times in both English and French and finally went out of print in 1983. Since that time, Dr. Godfrey has received many letters from bird watchers eagerly awaiting the reissue of his book.

The Birds of Canada is not something that you lug around hills and marshes when you go out bird watching, but it is a beautiful reference book to have at home. "I think that it appeals to the advanced bird watcher but almost anyone can use it" says Dr. Godfrey. When asked if he would work on a third edition, he grins, "If I'm still around, I'll do it."



And something for our younger readers:

What is a Bird?
Bonnie Gordon

Illustrations by Kiyomi Shoyama

48 pp., 16 colour, plus black-and-white illustrations
ISBN 0-660-10350-8
285 × 220 mm
\$9.95 (PB)

Édition française:
Qu'est-ce qu'un oiseau?
ISBN 0-660-90300-8

The Museum's *What is a Bird?* activity book was created as an educational tool, to introduce children from four to seven years old

to the fascinating world of birds in a fun and interactive way. This book was designed to present basic information about bird life — diet, size, flight and feathers, migration, beaks and feet, eggs and nests, camouflage, and habitat. It contains all kinds of fun activities, such as join-the-dots, matching-up and a crossword puzzle, as well as things to draw and pictures to colour. It shows how to make inexpensive bird feeders, origami birds and a bird mobile; there are even "bird jokes" that readers (and perhaps future ornithologists) can pass on to their friends!

The Birds of Canada and *What is a Bird?* are available in bookstores nationwide.

The Last Condors



for Stu

I watch
as we have watched
and changed with watching
through the centuries
but not enough
not enough to keep pace
or co-exist with
our heedless oppressors

and I have soared
as we have soared
through the centuries
between sun and rock
casting our shadows
over mammoth and
the slate-speared killers
who envied us our cool, long glide
we have watched that evolution of spears
and found in it the mirror
of our destruction
the beginning of our pain

we are dying
what do we understand of
rifles, of pesticides
the invasion of nesting grounds
shelters have grown into cities
and been wrapped in murky shrouds
foul air deepening

we are sixty, only sixty left
we wait
our red eyes glow with watching
vision blurred, feathers tattered and
grounded at last
we acknowledge our huddled disgrace

Helen Davies
Public Services Division

Postscript: Ms. Davies wrote this poem in 1978. There are now six California Condors remaining in the wild.